

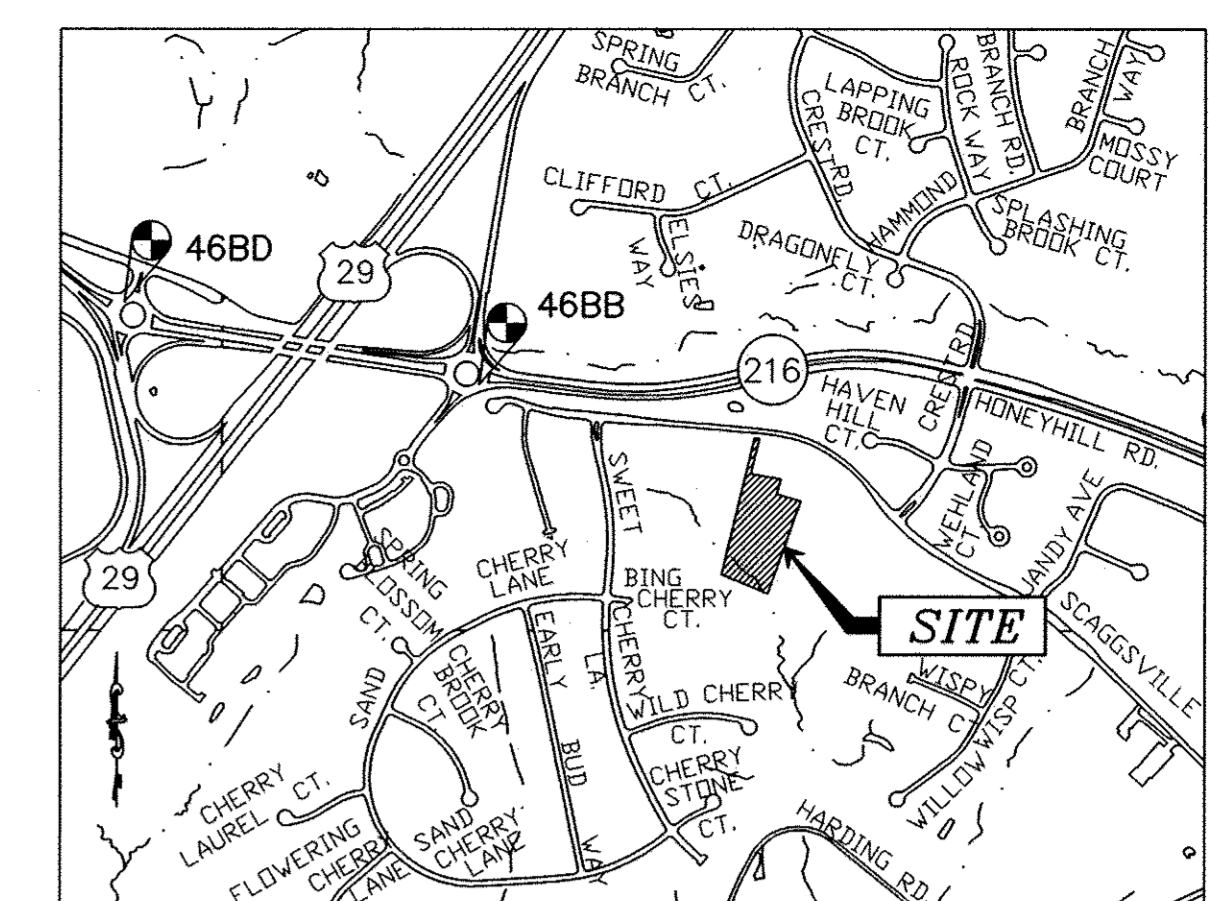
### SOILS TABLE

SYMBOL	RATING	NAME	K FACTOR	MAP #	COMMENTS
GhB	(B)	GLENELG URBAN LOAM, 6-8% SLOPES.	.37	20	
GhB	(C)	GLENVILLE-BAILE SILT LOAMS, 0-8% SLOPES.	.43	20	
MaC	(B)	MANOR LOAM, 8-15% SLOPES.	.32	20	

- ### ECP SITE ANALYSIS DATA:
1. AREA OF THE SITE = 3.61 AC ±
  2. IMPERVIOUS AREA = 0.61 AC ±
  3. AREA OF WETLANDS AND ITS BUFFERS = 0.24 AC ±
  4. AREA OF FLOODPLAIN = 0 AC ±
  5. AREA OF EXISTING FOREST = 0 AC ±
  6. AREA OF STREAM BUFFER = 1.42 AC ±
  7. AREA OF STEEP SLOPES 15% OR GREATER = 0.0 AC ±
  8. AREA OF STEEP SLOPES 25% OR GREATER = 0.0 AC ±
  9. AREA OF ERODABLE SOILS = 0.04 AC ±
  10. LIMIT OF DISTURBANCE AREA = 1.8 AC ±
  11. 6 NEW SINGLE FAMILY DETACHED LOTS ARE PROPOSED.
  12. GREEN OPEN AREA (PERVIOUS) = 2.00 AC ±

### SPECIMEN TREE

KEY	SPECIES	SIZE	CRZ	COMMENTS
ST A	RED MAPLE	34.5	51.75	FAIR HEAVY WIND COVER
ST B	NORWAY MAPLE	30.5	45.75	NOT NATIVE
ST C	SILVER MAPLE	34.0	51.0	GOOD CONDITION



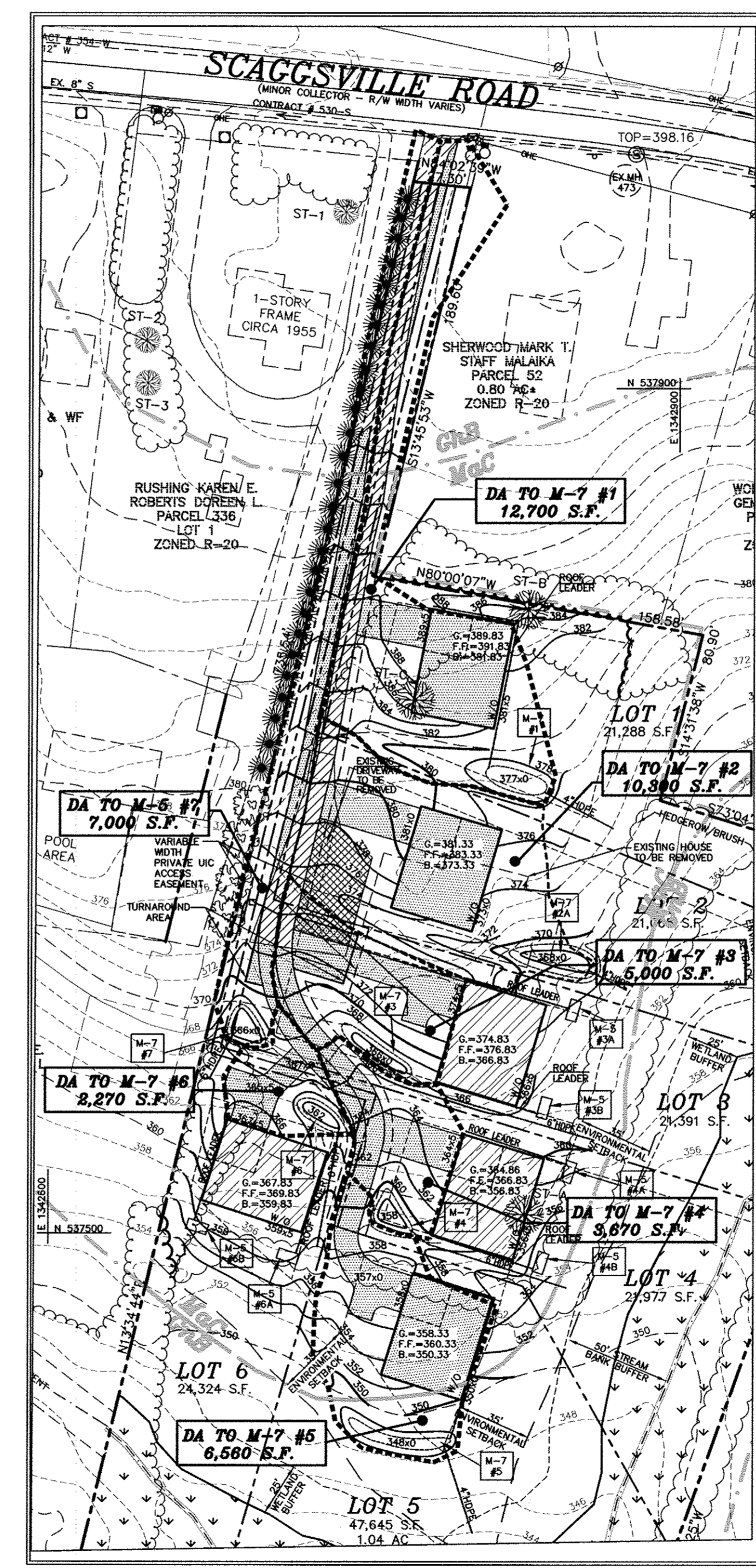
VICINITY MAP  
SCALE: 1"=1,000'  
ADD MAP-39, GRID-C3

- ### NOTES:
1. SITE ANALYSIS DATA:  
ADDRESS: 10965 SCAGGSVILLE ROAD LAUREL, MD 20723  
LOCATION: TAX MAP: 46 PARCEL: 263 GRID: 5 LOTS: 6  
ELECTION DISTRICT: SIXTH  
ZONING: R-20  
TOTAL AREA: 3.61 AC  
AREA OF ROAD DEDICATION: 0.00 AC ±  
AREA OF ROAD ROW: 0.00 AC ±  
PROPOSED USE FOR SITE: RESIDENTIAL  
TOTAL NUMBER OF LOTS: 6  
TOTAL NUMBER OF UNITS: 6  
TYPE OF PROPOSED UNIT: SFD
  2. COORDINATES BASED ON NAD '83 MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS  
NO. 46BB & 46BD  
STA. No. 46BB: N 538,306.5015; E 1,341,329.1564; ELEV. 422.637  
STA. No. 46BD: N 538656.7632; E1,339,461.5542; ELEV. 431.169
  3. THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS (COUNCIL BILL 45-2003). DEVELOPMENT OR CONSTRUCTION OF THESE LOTS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN, WAIVER PETITION OR BUILDING/GRADING PERMIT.
  4. SITE PLAN APPROVAL BY THE DEPARTMENT OF PLANNING AND ZONING IS REQUIRED PRIOR TO BUILDING PERMITS BEING ISSUED FOR THE CONSTRUCTION OF RESIDENTIAL DWELLINGS ON THESE LOTS.
  5. WETLAND AND ITS BUFFER EXIST ON SITE AS CERTIFIED IN THE WETLAND REPORT PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. IN JULY 2017.
  6. FOREST STAND DELINEATION PERFORMED BY ECO-SCIENCE PROFESSIONALS, INC. IN JULY 2017.
  7. APPROVAL OF THIS ECP DOES NOT CONSTITUTE ANY APPROVAL OF SUBSEQUENT SUBDIVISION OR SITE DEVELOPMENT PLANS. FURTHER COMMENTS WILL BE GENERATED UPON REVIEW OF THE APPLICABLE DEVELOPMENT PLANS IN ACCORDANCE WITH THE SUBDIVISION AND ZONING REGULATIONS. THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED REVIEW COMMENTS INCLUDING COMMENTS THAT MAY ALTER THE OVERALL SITE DESIGN AS THIS PROJECT PROGRESSES THROUGH THE PLAN REVIEW PROCESS.
  8. ALL EXISTING STRUCTURES ARE TO BE REMOVED.
  9. THERE ARE NO HISTORIC STRUCTURES OR CEMETERIES ON THIS SITE. THE PROPERTY IS NOT WITHIN A HISTORIC DISTRICT.
  10. NO GRADING OR REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE REQUIRED WETLANDS, STREAM(S), OR THEIR BUFFERS, FOREST CONSERVATION EASEMENT AREAS, 100 YEAR FLOODPLAIN AND AREAS OF STEEP SLOPES GREATER THAN 25% WITH CONTIGUOUS AREAS OF 20,000 SQUARE FEET OR GREATER UNLESS A FORMAL WAIVER PETITION IS GRANTED OR HAS BEEN DETERMINED TO BE A NECESSARY OR ESSENTIAL DISTURBANCE.
  11. NO AREAS OF STEEP SLOPES 25% OR GREATER ARE LOCATED WITHIN THE PROPOSED AREA OF DISTURBANCE.

- ### ESD NARRATIVE
1. THE PROPERTY CONTAINS WETLAND AND STREAMS. ALL THE NATURAL RESOURCES ARE PROTECTED BY THEIR BUFFERS. NO STRUCTURES WILL BE CONSTRUCTED WITHIN 35' FROM THE ENVIRONMENTALLY SENSITIVE AREA BUFFERS. NO FOREST EXISTS ON SITE. THERE ARE THREE SPECIMEN TREES ON SITE. TWO OF THEM WILL BE REMOVED.
  2. THE IMPROVEMENTS AND DEVELOPED AREA WILL MAINTAIN THE EXISTING DRAINAGE PATTERNS AS CLOSELY AS POSSIBLE. NO IMPACT IS PROPOSED THAT WOULD ALTER ANY NATURAL FLOW PATTERNS.
  3. EXISTING DRIVEWAY WILL BE USED TO SERVE AS USE-IN-COMMON ACCESS FOR ALL PROPOSED LOTS. USE OF NON-STRUCTURAL PRACTICES WERE INVESTIGATED. DUE TO THE EXISTING TOPOGRAPHY AND LIMITED SIZE OF THE LOTS, NON-STRUCTURAL PRACTICES WERE NOT FEASIBLE. M-7 RAIN GARDENS AND M-5 DRY WELLS HAVE BEEN PROVIDED FOR ALL THE REQUIRED ESDV.
  4. THE REQUIRED EROSION AND SEDIMENT CONTROL MEASURES WILL BE IN ACCORDANCE WITH THE LATEST MDE STANDARDS AND SPECIFICATIONS UTILIZING SILT FENCES AND SUPER SILT FENCES. SEDIMENT TRAPS WILL BE CONVEYED TO MICRO BIO-RETENTIONS.
  5. TABLE 5.2, SUMMARY OF SITE DEVELOPMENT STRATEGIES WAS UTILIZED TO THE EXTENT ALLOWABLE BY THE CURRENT HOWARD COUNTY ZONING AND LAND DEVELOPMENT REGULATIONS.
  6. IN DESIGNING THIS PROJECT, AND AFTER WE PLANNED THE PROJECT TO MINIMIZE IMPERVIOUS AREAS, WE UTILIZED ESD MEASURES IN THE FOLLOWING ORDER OF PREFERENCE:  
MICRO-SCALE PRACTICES (M-7) AND (M-5).

### SWM SUMMARY TABLE

LOT	ESDV REQUIRED	SWM PRACTICE	ESDV PROVIDED
1	388 C.F.	RAIN GARDEN (M-7)	466 C.F.
2	381 C.F.	RAIN GARDEN (M-7)	402 C.F.
3	504 C.F.	RAIN GARDEN (M-7), DRY WELLS (M-5)	524 C.F.
4	454 C.F.	RAIN GARDEN (M-7), DRY WELLS (M-5)	473 C.F.
5	419 C.F.	RAIN GARDEN (M-7)	489 C.F.
6	418 C.F.	RAIN GARDEN (M-7), DRY WELLS (M-5)	466 C.F.
P/U/UC DRIVEWAY	152 C.F.	RAIN GARDEN (M-7)	243 C.F.
TOTAL	2,716 C.F.		3,063 C.F.



DRAINAGE AREA MAP TO SWM FACILITIES

### MIN. LOT SIZE CHART

LOT#	GROSS AREA	PIPESTEM AREA	MIN. LOT SIZE
1	20,000 S.F.	1,288 S.F.	21,288 S.F.
2	20,000 S.F.	1,065 S.F.	21,065 S.F.
3	20,000 S.F.	1,391 S.F.	21,391 S.F.
4	20,000 S.F.	1,977 S.F.	21,977 S.F.
5	45,394 S.F.	2,251 S.F.	47,645 S.F.
6	22,630 S.F.	1,694 S.F.	24,324 S.F.

- ### LEGEND
- AREA TREATED BY RAIN GARDENS (M-7)
  - AREA TREATED BY DRY WELLS (M-5)
  - AREA OF WETLANDS DRY WELLS (M-5)
  - EX. PAVEMENT TO REMAIN
  - LIMIT OF DISTURBANCE
  - TEMP. DIVERSION SWALE
  - DIVERSION FENCE
  - DRAINAGE AREA
  - EX. PAVEMENT TO BE REMOVED
  - DRY WELL
  - RAIN GARDEN

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 [Signature] DATE: 12/21/17  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 [Signature] DATE: 12/21/17  
 CHIEF, DIVISION OF LAND DEVELOPMENT

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 17942, EXP DATE 09/03/18  
 [Signature] DATE: 12/15/17  
 R. JACOB HIKMAT P.E.

**OWNER**  
 RAFAT LLC  
 7350-B GRACE DRIVE  
 COLUMBIA, MD 21044  
 410-997-0296

project: 16-018 date: DEC. 2017  
 illustration: MMM scale: 1"=50'  
 approval: MMM  
 description: ISLA'S WOODS LOTS 1 - 6  
 revisions: ENVIRONMENTAL CONCEPT PLAN  
 no.: 1 OF 1

MILDENBERG, BOENDER & ASSOC., INC.  
 Engineers Planners Surveyors  
 7350-B Grace Drive, Columbia, Maryland 21044  
 (410) 997-0296 Tel. (410) 997-0298 Fax.